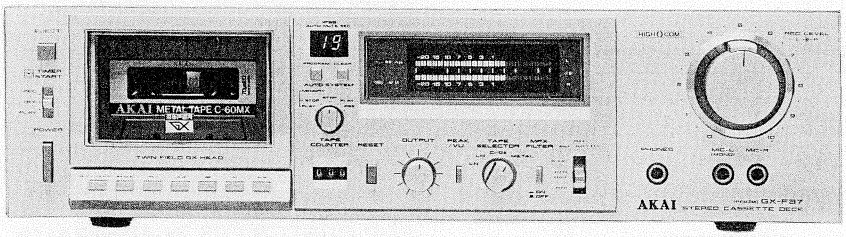
GX-F37

STEREO CASSETTE DECK

Notes:	• Cassette tape in photograph not included in standard accessories. • This manual is applicable to both silver and black panel models.
Remarques:	• La bande de cassette sur la photo n'est pas comprise dans les accessoires standards. • Ce manuel s'applique aussi aux modèles avec panneaux argent et noir.
Opmerkingen:	• De in de foto's afgebeelde cassettes behoren niet tot het standaardtoebehoren. • Deze gebruiksaanwijzing is van toepassing op modellen met zilver en zwart paneel.
Anmärkningar:	• Kassettbandet på bilden hör inte till standard tillbehören. • Bruksanvisningen gäller bade för modellen med silverpanel och modellen med mattsvart panel.
Anmerkungen:	• Die Cassette im Bild gehört nicht zum Standardzubehör. • Diese Betriebsanleitung gilt auch für die Ausführung mattsilber und mattschwarz.
Notas:	• La cinta casete mostrada en la fotografía no está incluída como accesorio estándar. • Este manual cubre ambos modelos, el de panel plateado y el de panel negro.



WARNING

To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

Operator's Manual
Manuel de l'utilisateur
Gebruiksaanwijzing
Bruksanvisning
Bedienungsanleitung
Manual del usuario

AKAI

MANUFACTURED & DISTRIBUTED BY AKAI ELECTRIC CO., LTD.
AKAI TRADING CO., LTD./AKAI AMERICA LTD.

WARNING

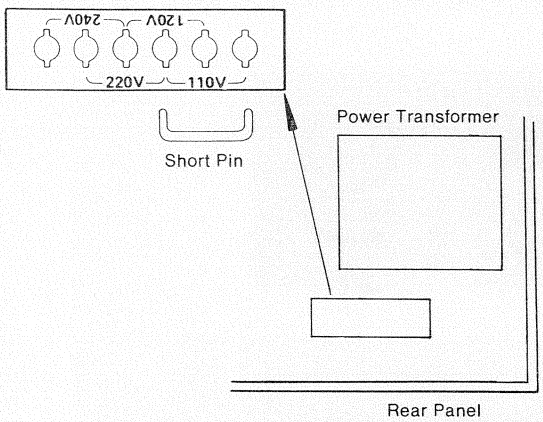
Voltage Selection

Power requirements for electrical equipment differ from area to area.
Please ensure that your machine meets the power requirements in your area.
If in doubt, consult a qualified electrician.
120V, 60 Hz for USA and Canada
220V, 50 Hz for Europe except UK
240V, 50 Hz for UK and Australia
110V/120V/220V/240V, 50/60 Hz internally switchable for other countries.

DO NOT ATTEMPT THIS CONVERSION YOURSELF.

Voltage conversion (Models for Canada, USA, Europe, UK and Australia are not equipped with this facility). Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V or 240V as required. If your machine's voltage can be converted, refer the following voltage conversion to a qualified Service Repair Shop or professional service personnel.

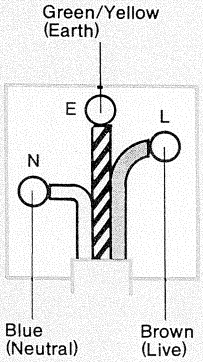
1. Disconnect the Power Cord.
2. Loosen the holding screws and remove the top panel.
3. Remove the short pin plug from the present holes and replace in the correct holes. Follow the markings explicitly.



FOR CUSTOMERS IN THE UK
IMPORTANT FOR YOUR SAFETY

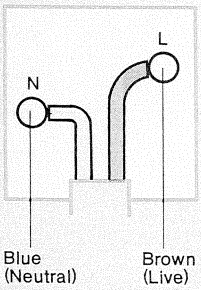
The flex supplied with your machine will have either two wires or three as shown in the illustrations.

THREE CORE FLEX
WARNING
THIS APPARATUS MUST BE EARTHED
IMPORTANT



The wires in this mains lead are coloured in accordance with the following code: Green-and-yellow: Earth
Blue: Neutral,
Brown: Live
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or coloured green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

TWO CORE FLEX
IMPORTANT



The wires in this mains lead are coloured in accordance with the following code: Blue: Neutral,
Brown: Live
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

* Do not connect any wire to the larger pin marked E or ⏚ when wiring a plug. Ensure that all terminals are securely tightened and that no loose strands of wire exist.

FOR CUSTOMERS IN AUSTRALIA

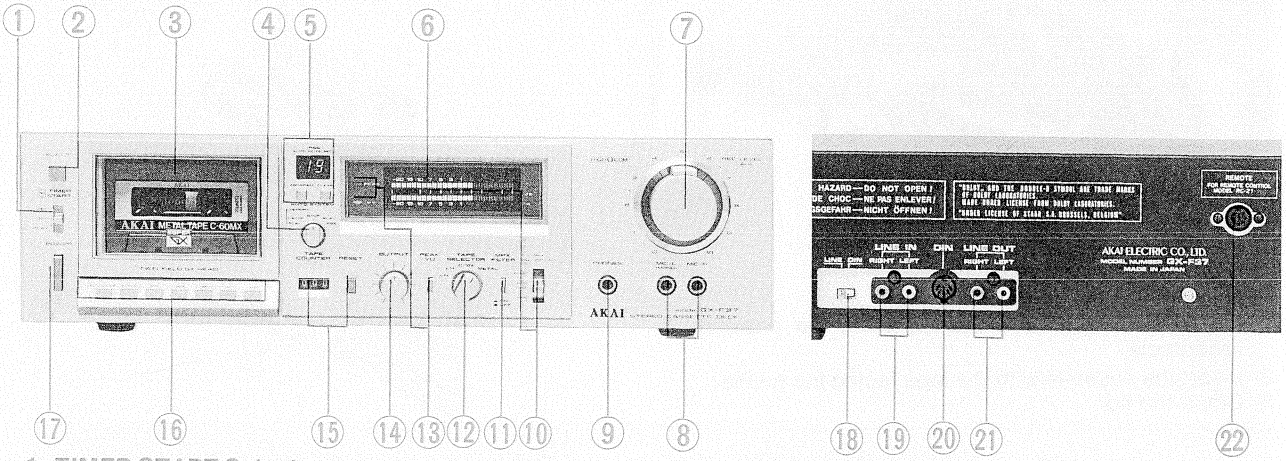
If your machine comes with a three core power cord, FOR YOUR SAFETY.

1. Insert this plug only into an effectively earthed three-pin plug socket outlet.
2. If any doubt exists regarding the earthing, consult a qualified electrician.
3. Extension cords, if used, must be three core correctly wired.

PRECAUTIONS

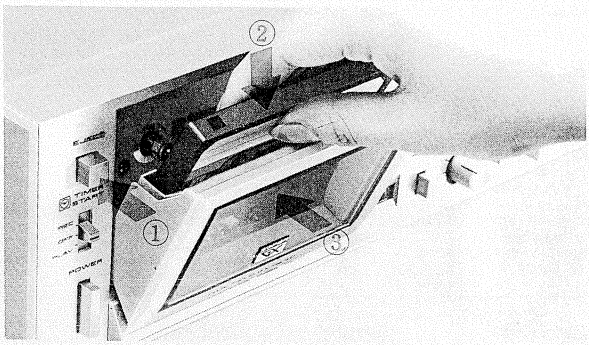
1. Use only household AC power sources.
   Never use DC power sources.
2. Touching the plug with wet hands risks dangerous electric shocks.
   Always pull out by the plug and never the cord.
3. Make sure the power consumption to each audio component does not exceed wattage specified.
   Only connect other audio components.
4. Only let a qualified professional repair or reassemble the equipment. An unauthorized person may touch the internal parts and receive a serious electric shock.
5. Never allow a child to put anything, especially metal into this equipment. A serious shock or malfunction may occur.
6. If water is spilled on this equipment, disconnect and call your dealer.
7. Make sure the equipment is well ventilated and away from direct sunlight.
8. Keep away from heat (stoves, etc.) to avoid damage to the external surface and internal circuits.
9. Avoid spray-type insecticides which will damage the equipment and may ignite suddenly.
10. To avoid damaging the finish never use alcohol, paint thinner or other similar chemicals.
11. Always place the equipment on a flat and solid surface.
12. Please read this manual in its entirety and keep it handy for further reference.

CONTROLS



1. TIMER START Selector
   REC: Set to this position for absentee recording with a timer.
   OFF: Set to this position at all other times when the Timer Start operation is not to be engaged.
   PLAY: Set to this position for timed playback with a timer.
2. EJECT Button
3. Cassette Receptacle
4. AUTO SYSTEM Selector
5. IPSS/AUTO MUTE SEC Display, PROGRAM and CLEAR Buttons
6. FL Display Bar Meters with Maximum Hold
7. Left ⊕ Right Recording Level Controls (REC LEVEL L ⊕ R)
   The outer ring controls the right channel recording input level and the inner knob controls the left channel recording input level. The controls are coaxial therefore they may be adjusted independently or together.
   * Coaxial controls and enumerated positions facilitate easy fade-in (gradual increase in volume at the beginning of a musical selection) and fade-out (gradual decrease in volume at the end) recording operations.
8. Microphone Jacks (MIC-L: left, MIC-R: right)
   Connect one microphone to the left jack for monophonic recording.
   * Some models have MONO MIC jack. Connect to this jack for monophonic recording.
9. Headphone Jack (PHONES)
   Accommodates stereo headphones of 8 ohms impedance for monitoring or private headphone listening.
10. Noise Reduction Selector and Indicator
    D-NR: Set to this position for recording and playback with D-NR.
    Set to this position and depress the MPX FILTER switch for recording with D-NR from FM stereo broadcasts.
    HIGH COM: Set to this position for recording and playback with HIGH COM.
    Set to this position and depress the MPX FILTER switch for recording with HIGH COM from FM stereo broadcasts.
    OFF: Set to this position for recording and playback without D-NR and HIGH COM.
    * During playback, set the Noise Reduction selector to the position it was set during recording.
    * HIGH COM reduces the noise across the entire frequency response range.
    * Tapes recorded with HIGH COM must be played back on a deck with HIGH COM.
11. MPX FILTER Switch
    Set the Noise Reduction selector to D-NR or HIGH COM and depress this switch for recording with D-NR or HIGH COM FM stereo broadcasts.
    Leave undepressed at all other times.
12. TAPE SELECTOR
    Set to position corresponding to the tape for the correct equalization and bias adjustment.
    LN — Low noise tapes
    LH — Low noise high output tapes
    CrO_2 — Chrome oxide tapes
    METAL — Metal tapes
13. PEAK/VU Selector and Indicators
    PEAK: Depress to show the peak levels of the input source for both recording and playback for both channels on the FL Display Bar Meters.
    VU: Leave undepressed to show the average levels of the input source for both recording and playback for both channels on the FL Display Bar Meters.
14. OUTPUT Control
    Adjusts line and headphone outputs.
15. TAPE COUNTER and RESET Button
16. Operating Buttons
    * For stable Timer Start operation, the Operating buttons will not be activated for approx. 5 seconds after the POWER switch is turned on.
17. POWER Switch
18. LINE/DIN Selector (Some models do not have this facility.)
    LINE: Set to this position for input from the LINE IN jacks.
    DIN: Set to this position for input from the DIN jacks.
19. LINE IN Jacks (RIGHT and LEFT)
    Connect to the outputs of an external amplifier or tape deck or recorder.
20. DIN Jack (Some models do not have this facility.)
    Can be used instead of the LINE IN and LINE OUT jacks for connection with an external amplifier through a DIN connection cord.
21. LINE OUT Jacks (RIGHT and LEFT)
    Connect to the inputs of an external amplifier or tape deck or recorder.
22. REMOTE Control Jack (Some models do not have this facility.)
    Connect the optional Remote Control Unit RC-21 for remote control operation.
    * Use only an AKAI recommended connecting cord.

TAPE LOADING



1. Depress the EJECT button to open the cassette receptacle.
2. Insert the cassette with the tape facing the heads.
3. Close the lid.

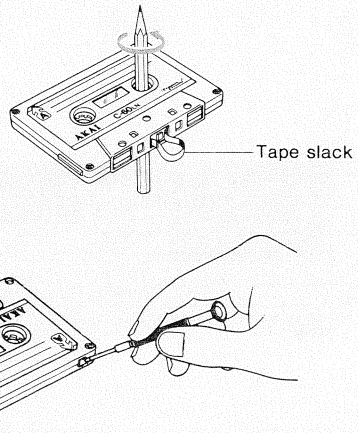
STANDARD REFERENCE AND RECOMMENDED TAPES

Tape Selector Position	Recommended Tapes	
LN (Low Noise) Position	AKAI FUJI MAXELL SCOTCH TDK	LN* FL LN, UL Dynarange D
LH (Low Noise High Output) position	FUJI MAXELL SCOTCH TDK SONY	FX-I UD*, UDXL, UDXL-I, UDXL-IS MASTER I AD, OD HF
CrO_3 (CHROME) Position	FUJI MAXELL SCOTCH TDK	FX-II UDXL-II, UDXL-IIS MASTER II SA*, SA-X
METAL Position	AKAI FUJI MAXELL SCOTCH TDK	MT, MX Metal MX METAFINE MA*, MA-R

When playing back FeCr tapes, set to CrO_2 position or Metal position.

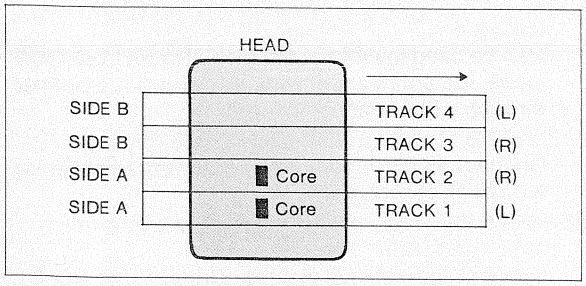
* C-60 tapes with this mark are the standard reference tapes.

CASSETTE TAPE CARE



* Heads should be kept clean and demagnetized at all times.
* Before using a cassette tape, confirm whether tape slack exists. As tape slack causes the tape to twist or tangle around the pinch wheel and capstan, take up slack if necessary.
* Recording cannot be made on the leader tape. Therefore, when using a new cassette tape, be sure to forward the tape slightly so that the leader tape is not in the head path.
* Tapes which have been stored in a hot moist place for a period of time or cassette tape with bent cases should not be used. Such tapes may curl or have greasy places altering tape speed and preventing proper performance. Always store tapes in a cool, dry place.
* Do not touch the tape with your fingers as high frequency signals cannot be recorded in places which are not clean on the tape.
* Cassette tapes are equipped with a break-out tab for both A and B sides. When these tabs have been removed to protect an important recording, no further recording can be made on the tape unless the cavities are plugged or covered with a piece of tape.

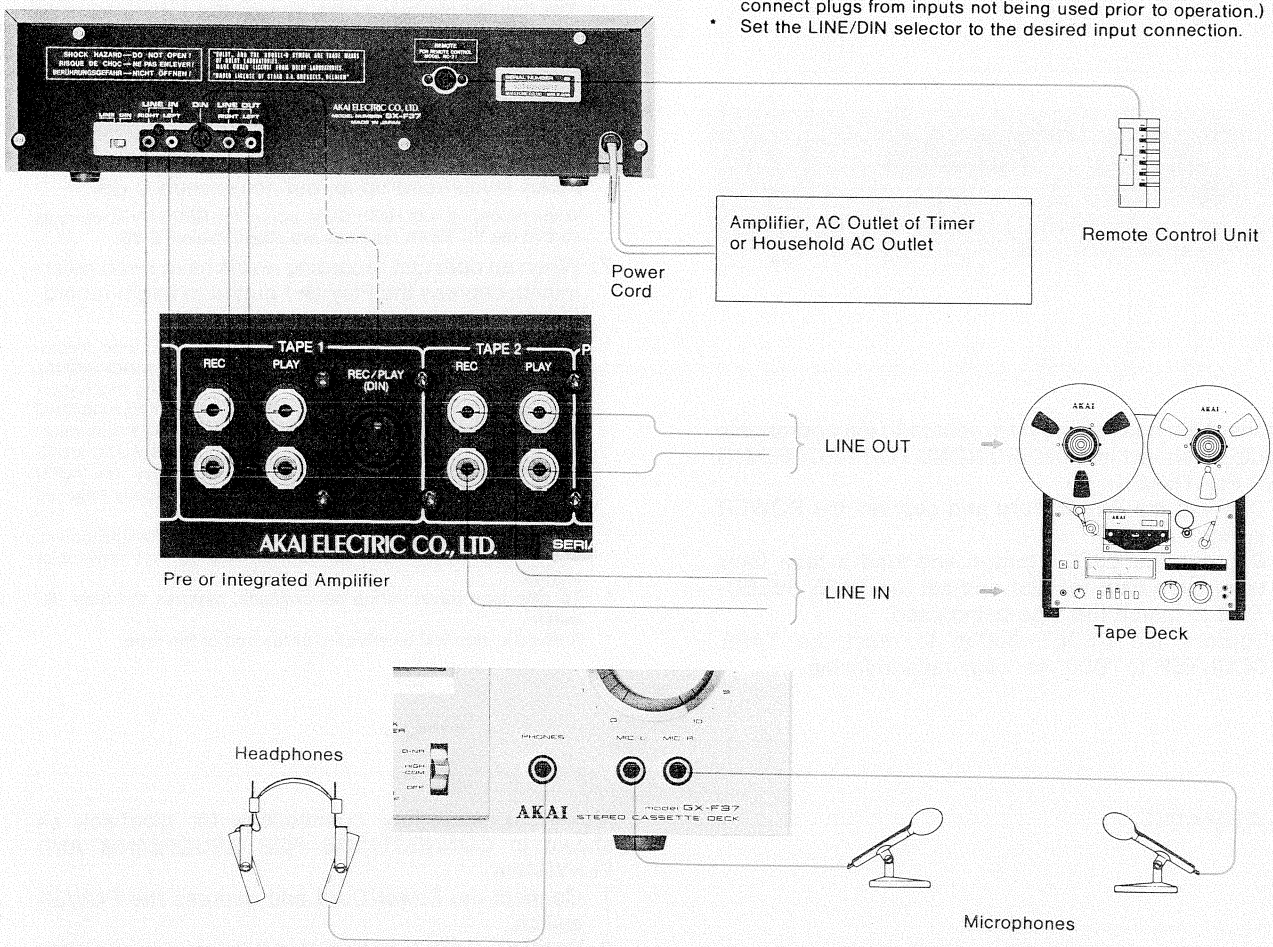
CASSETTE TRACK SYSTEM



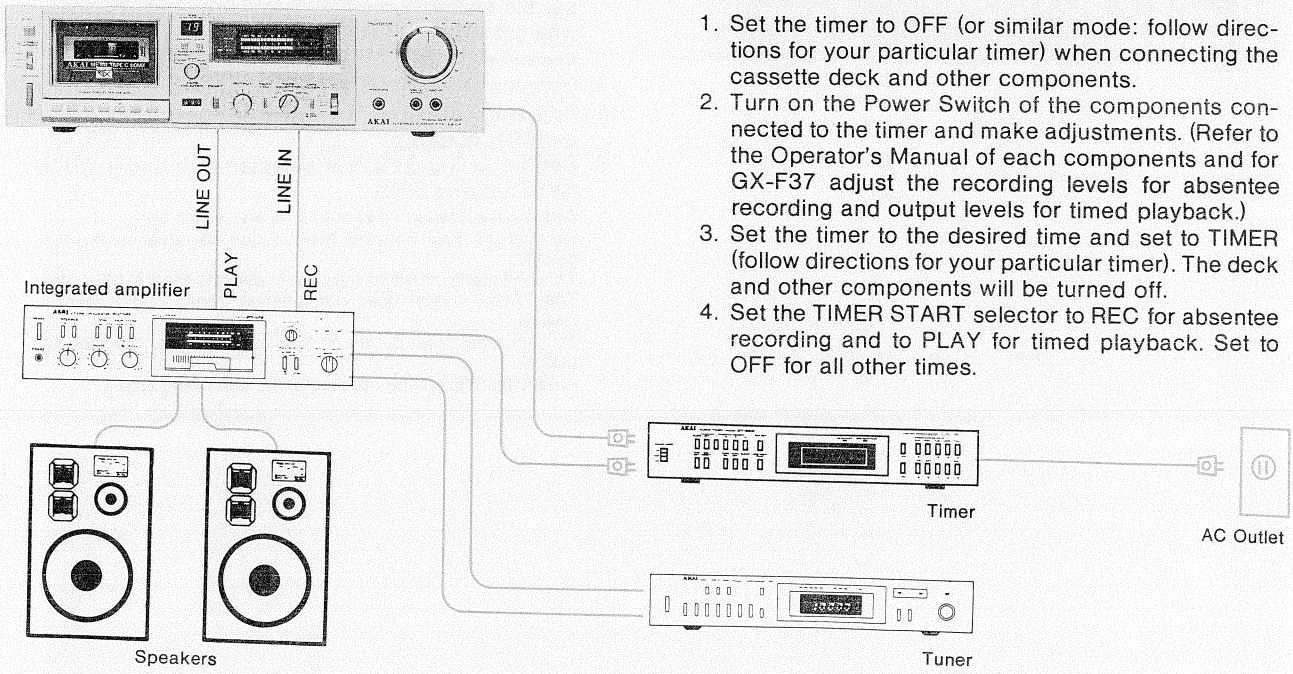
This model employs a 4-track recording/playback system. The first half of the stereophonic recording or playback takes place on tracks 1 and 2. The second half takes place on tracks 3 and 4 after the cassette has been inverted. Recording and playback depends upon the length of the tape (C-30, 30 minutes; C-60, 60 minutes, etc.). Monaural and stereo recorded tapes can be played back on either stereo or monaural cassette recorders without any loss in quality. Because the total track width of the left and right channels is equal to that of the monaural track, the playback head will scan both left and right channels together. This results in automatic mixing of left and right channels from the stereo tape for monaural reproduction.

CONNECTIONS
FOR RECORDING AND PLAYBACK

- Set all the components' power switches to off before connecting.
- When microphones are connected, DIN and LINE inputs are cut.
- To avoid cross-talk, do not operate the machine with input sources connected to both the LINE and DIN input jacks. (Disconnect plugs from inputs not being used prior to operation.)
- Set the LINE/DIN selector to the desired input connection.



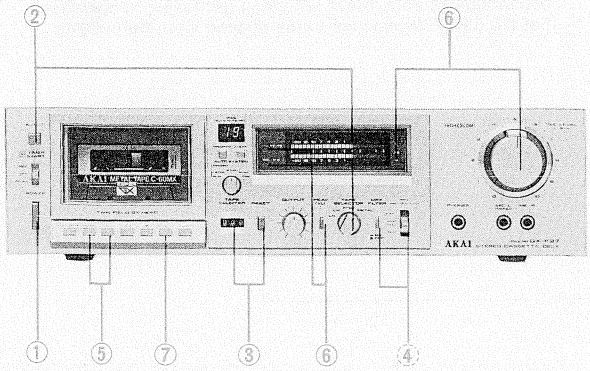
ABSENTEE RECORDING AND TIMED PLAYBACK



1. Set the timer to OFF (or similar mode: follow directions for your particular timer) when connecting the cassette deck and other components.
2. Turn on the Power Switch of the components connected to the timer and make adjustments. (Refer to the Operator's Manual of each components and for GX-F37 adjust the recording levels for absentee recording and output levels for timed playback.)
3. Set the timer to the desired time and set to TIMER (follow directions for your particular timer). The deck and other components will be turned off.
4. Set the TIMER START selector to REC for absentee recording and to PLAY for timed playback. Set to OFF for all other times.

OPERATIONS

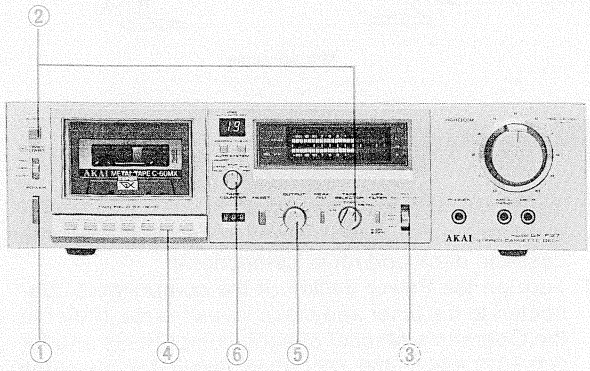
RECORDING



Connect the desired program source to the appropriate inputs as shown in CONNECTIONS FOR RECORDING AND PLAYBACK.

1. Connect the Power Cord and depress the POWER switch.
2. Depress the EJECT button and load a tape (new tape gives best results) and set the TAPE SELECTOR to match the tape being used.
3. Depress the RESET button to reset the TAPE COUNTER to "000" for easy tape indexing.
4. Set the Noise Reduction selector and MPX FILTER switch if recording with D-NR or HIGH COM is desired.
5. Depress the PAUSE and Recording (REC) buttons simultaneously.
   * The Play (▶) button will flash on and off to indicate recording standby.
6. Set the PEAK/VU selector to VU and adjust the recording levels. Observe the FL Display Bar Meters and adjust the REC LEVEL controls so that the VU levels read up to, but not exceed 0 dB. Set the PEAK/VU selector to PEAK and adjust so that the PEAK levels read up to, but not exceed 0 dB.
   * When recording with HIGH COM, adjust the REC LEVEL controls so that the VU/PEAK readings are slightly below 0 dB.
7. When an optimum recording levels have been determined, depress the Play (▶) button to begin recording.
   * When the AUTO MUTE button is held depressed during recording, the recording amp circuit will be brought into a NO-SIGNAL mode. No recording will be made on the tape during this period. Depress the AUTO MUTE button just once and required seconds of blank space will be created automatically for IPSS operation. Either way, the seconds will be shown on the IPSS/AUTO MUTE SEC Display. After the required seconds or when the AUTO MUTE button is undepressed, PAUSE is automatically engaged and the equipment will stand by for recording.
   * To momentarily suspend tape travel, depress the PAUSE button. The PAUSE button does not function during fast forward or rewind.
   * To stop tape travel during performance, depress the Stop (■) button.
   * Automatic stop will be effected at the end of the tape.

PLAYBACK



Make the necessary connections for playback as shown in CONNECTIONS FOR RECORDING AND PLAYBACK.

1. Connect the Power Cord and depress the POWER switch.
2. Depress EJECT button and load a pre-recorded tape and set the TAPE SELECTOR to match the tape being used.
3. If the tape was recorded with D-NR or HIGH COM, set the Noise Reduction selector to the position it was set during recording.
   * Confirm that the MPX FILTER switch is undepressed.
4. Depress the Play (▶)button to begin playback.
5. Adjust the OUTPUT Level control and the external amplifier controls.
6. Set the AUTO SYSTEM selector. See under AUTO SYSTEM and IPSS.
   * Depress the Rewind (◀◀) button, to rewind the tape.
   * Depress the Fast Forward (▶▶) button, to advance the tape quickly.
   * To momentarily suspend tape travel depress the PAUSE button. The PAUSE button does not function during fast forward or rewind.
   * To stop tape travel during performance, depress the Stop (■) button.
   * Automatic Stop will be effected at the end of the tape.

AUTO SYSTEM

MEMORY: Depress the RESET button at any point on the tape and set the TAPE COUNTER to "000". If the AUTO SYSTEM was set to:

MEMORY PLAY: Whenever the Rewind (◀◀) button is depressed, the tape will automatically rewind to "999" and playback will begin automatically.

* The Play (▶) button will flash on and off during rewind to indicate that the playback will take place automatically.

MEMORY STOP: Whenever the Rewind (◀◀) button is depressed the tape will automatically rewind to "999" and stop.

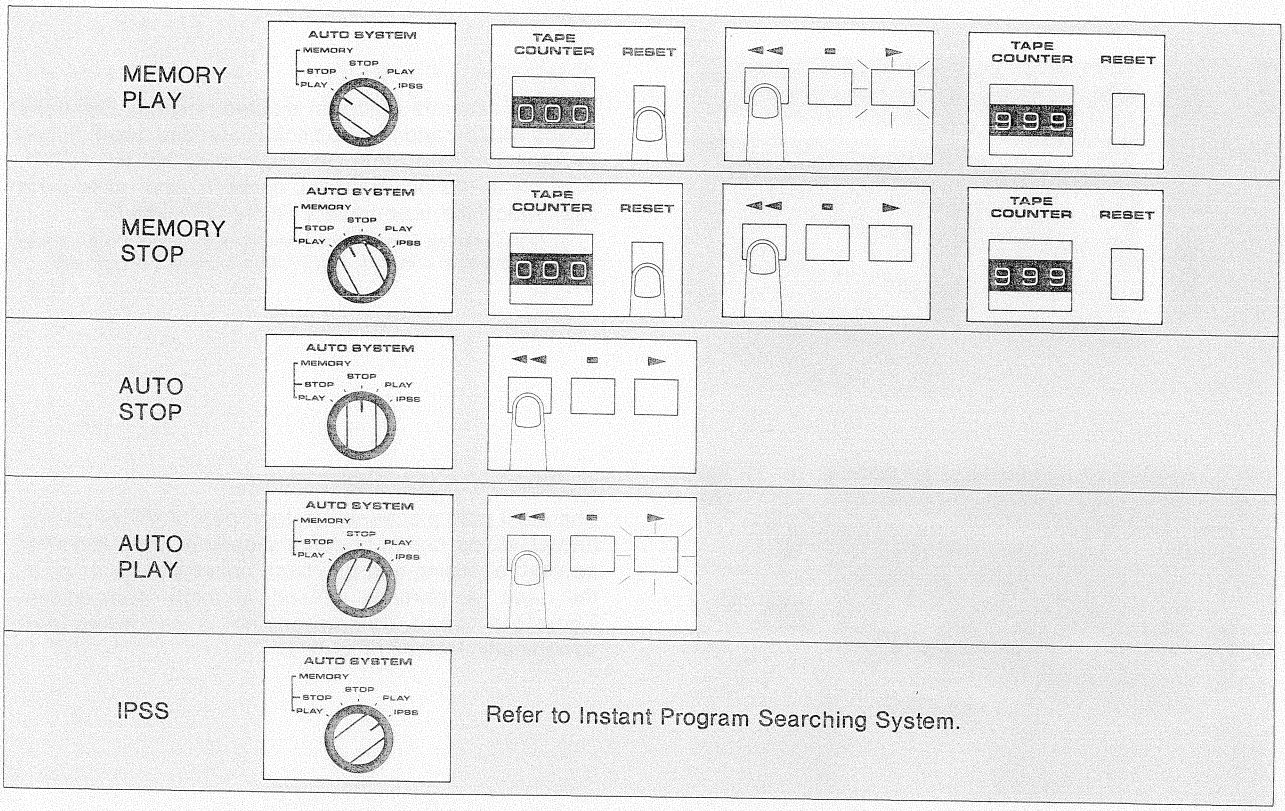
AUTO: Whenever the Rewind (◀◀) button is depressed, if the AUTO SYSTEM was set to:

AUTO STOP: The tape will automatically rewind to the beginning of the tape and stop.

AUTO PLAY: The tape will automatically rewind to the beginning of the tape and begin playback automatically.

* The Play (▶) button will flash on and off during rewind to indicate that the playback will take place automatically.

IPSS: When set to this position, IPSS operation will take place.



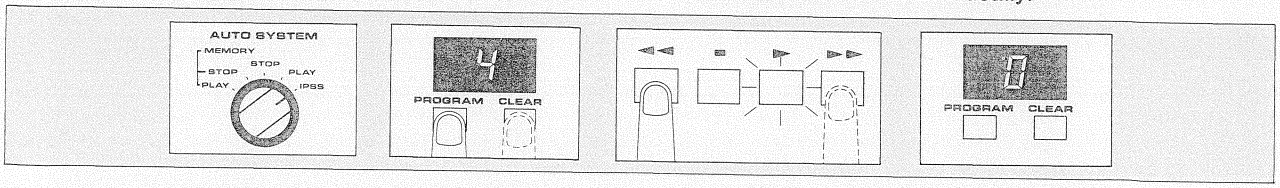
INSTANT PROGRAM SEARCHING SYSTEM (IPSS)

This system operates by detecting the number of blank portions (up to 19 blank portions) of tape between the song currently being listened to and the next song to be listened to. To create the blank portions, just depress the AUTO MUTE switch. The required seconds of blank space will be counted-down on the IPSS/AUTO MUTE SEC display. After the blank space is created, PAUSE is automatically engaged and the equipment will stand by for recording.

To program, proceed as follows:

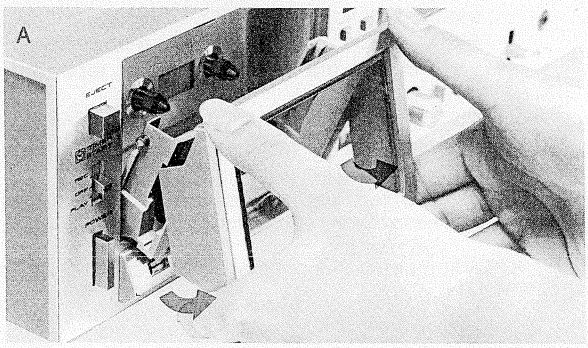
(IPSS operation operates only during the playback mode.)

1. Set the AUTO SYSTEM selector to IPSS.
2. Count the number of blanks between the song which is being played and the next song you want to listen to. Include the blank at the beginning of the song to be listened to next.
3. Depress the PROGRAM button again and again until the correct number of blanks appears on the IPSS/AUTO MUTE SEC display. If a mistake is made, depress the CLEAR button to return to "0".
4. If the song you want to listen to is towards the beginning of the tape, depress the Rewind (◀◀) button and if it is towards the end of the tape, depress the Fast Forward (▶▶) button.
5. The tape will begin to run and the number of blanks count-down. When the display shows "0", playback will commence automatically.



MAINTENANCE

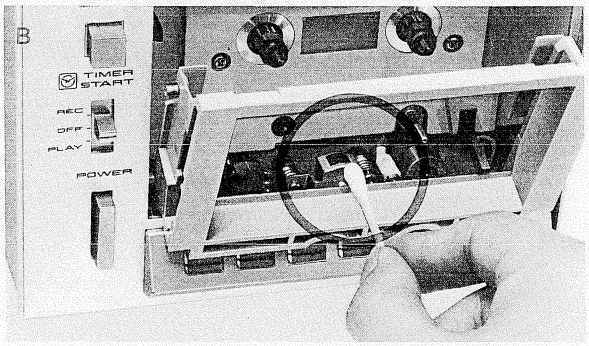
Turn off the POWER Switch.



1. REMOVING THE RECEPTACLE LID

Depress the EJECT button and remove the cassette tape from the receptacle. The receptacle lid can be removed by pulling both lower ends of the lid toward you. Refer to Figure A.

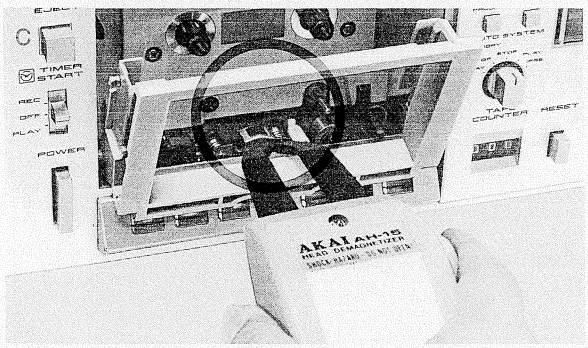
* Be sure to use both hands.



2. HEAD CLEANING

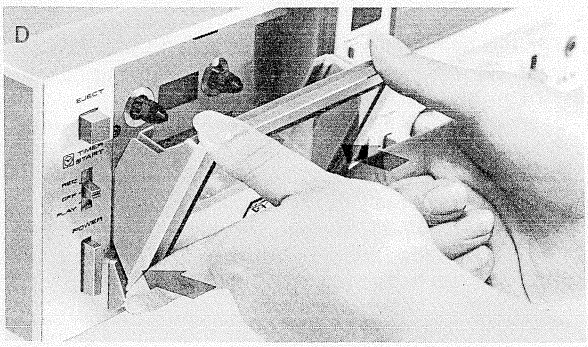
With the cassette holder at ejected position, clean the heads with a cotton swab stick which has been dipped in Akai Cleaning Fluid (Akai Cleaning Kit HC-550P). Also clean the pinch wheel, capstan, and other parts over which the tape travels. Refer to Figure B.

* If Akai Cleaning Fluid is not available, use alcohol. Do not use other chemical cleaners as the rubber parts will deteriorate.



3. HEAD DEMAGNETIZING

The steel pole pieces which form part of the recording and playback heads become slightly magnetized after several recording and playback hours and as a result, the tape is partially erased at high frequencies. Therefore, head demagnetizing is recommended periodically. Refer to Figure C.



4. REPLACING THE RECEPTACLE LID

To replace the lid onto holder, hook the upper part of the lid and fit the lower part of the lid onto holder. Refer to Figure D.

* Do not insert a cassette tape with the receptacle lid off.
* The receptacle lid is properly attached when it is even with the front panel.

TROUBLE SHOOTING

The conditions listed below do not indicate mechanical failure of your unit. If your machine exhibits any of these conditions, check for trouble as indicated.

Recording button will not function
* Cassette is not loaded.
* Cassette break-out tabs are removed. Plug or cover cavities.

IPSS will not function
* Deck not in playback mode.

Tape will not run
* Power is not being supplied. Check Power Cord and POWER switch.
* Tape slack. Take up slack as mentioned in "Cassette Tape Care."

Noisy Sound
* Heads are magnetized. Demagnetize following head demagnetizing instructions.
* Heads are dirty. Clean following head cleaning instructions.
* Connections are incorrect.
* Wrong TAPE SELECTOR position. Position according to the kind of tape being used.

Previous recording will not erase
* Erase head dirty. Clean following head cleaning instructions.

Distorted sound
* Recording level is too high. Use peak level indicators as explained under Recording.

Playback cannot be effected
* Connections are incorrect.
* Controls are not properly adjusted or positioned. Check external amplifier controls.
* AUTO SYSTEM selector set at wrong position.
* PAUSE button is depressed.

Recording will not take place
* Dirty head. Clean following head cleaning instructions.
* Connections are incorrect.
* Controls are not properly positioned or adjusted. Check external source controls.
* PAUSE button is depressed.

Should there be a problem with your machine, write down the model and serial numbers and all pertinent data regarding warranty coverage as well as a clear description of the existing trouble and contact your nearest authorized Akai Service Station or the Service Department of Akai Company, Tokyo, Japan.

TECHNICAL DATA

Track System..... 4 Track 2 Channel Stereo System
Tape..... Philips Type Cassette
Tape Speed..... 4.76 cm/s ±1.0% (1-7/8 ips. ±1.0%)
Heads..... Erase head × 1
Twin Field Super GX head for recording/playback × 1
Motors..... Electronically speed controlled D.C. motor for capstan drive × 1
D.C. motor for reel drive × 1
Wow & Flutter..... Less than 0.04% WRMS, 0.11% (DIN 45 500)
Tape Winding Time..... 80 sec. using a C-60 cassette tape
Frequency Response... LN: 30 to 15,000 Hz ±3 dB (–20 VU)
LH: 30 to 16,000 Hz ±3 dB (–20 VU)
CrO_2: 30 to 16,500 Hz ±3 dB (–20 VU)
30 to 9,000 Hz ±3 dB (0 VU)
Metal: 30 to 19,000 Hz ±3 dB (–20 VU)
30 to 13,000 Hz ±3 dB (0 VU)
Signal to Noise Ratio.... LN: Better than 58 dB
LH: Better than 58 dB
CrO_2: Better than 60 dB
Metal: Better than 60 dB
(measured via tape with peak recording level)
HIGH COM ON 80 dB (Metal), D-NR ON: Improves up to 10 dB above 5 kHz
Harmonic Distortion.... LN: Less than 0.8%
LH: Less than 0.8%
CrO_2: Less than 0.7%
Metal: Less than 0.7%
Dynamic Range..... 72 dB at 1,000 Hz HIGH COM OFF
94 dB at 1,000 Hz HIGH COM ON
Input..... MIC: 0.25 mV (input impedance 5.0 kohms)
Required microphone impedance: 600 ohms
Line: 70 mV (input impedance 30 kohms)
Output..... Line: 410 mV at 0 VU
Required load impedance: more than 20 kohms
Phone: 100 mV/8 ohms at 0 VU
DIN..... Input: 2 mV (input impedance 10 kohms)
Output: 410 mV
Required load impedance: more than 20 kohms
Power Requirements.... 120V, 60 Hz for USA and Canada
220V, 50 Hz for Europe except UK
240V, 50 Hz for UK and Australia
110V/120V/220V/240V, 50/60 Hz internally switchable for other countries.
Dimensions..... 440(W)x118(H)x285(D)mm (17.3x4.6x11.2")
Weight..... 6.9 kg (15.2 lbs)

STANDARD ACCESSORIES

Connection Cords..... 1 set
Operator's Manual..... 1

* For improvement purposes, specifications and design are subject to change without notice.
* HIGH COM is a trademark of AEG-TELEFUNKEN.